

CERTIFICATE OF ANALYSIS

PRODUCT:	Tyrphostin AG-490 [Tyrphostin B42]; JAK Inhibitor; [N-Benzyl-3,4-dihydroxy-benzylidenecyanoacetamide]; [α -Cyano-(3,4-dihydroxy)-]N-benzylcinnamamide] C ₁₇ H ₁₄ N ₂ O ₃ , M.W. 294.3, CAS# [133550-30-8]
PRODUCT NUMBER:	A-1164
LOT NUMBER:	E1341A
APPEARANCE:	Tan Solid or Powder
SOLUBILITY:	Soluble in DMSO (30mg/ml), dimethyl formamide (40mg/ml) or 100% ethanol (10mg/ml).
ANALYSIS (TLC):	> 98%
NMR:	Conforms
PRODUCT DESCRIPTION:	AG-490 is a potent inhibitor of the JAK-2 tyrosine kinase. In acute lymphoblastic leukemia (ALL) cells, which abundantly express JAK-2, AG-490 dose-dependently inhibited DNA synthesis, blocked cell growth and induced apoptosis. At 5 μ M, AG-490 almost completely blocked the growth of all pre-B ALL cells but had no significant effect on the growth of mitogen-stimulated normal B or T cells, B-cell lymphoma or T-cell leukemia cells. AG-490 does not significantly inhibit other kinases such as Lck, Lyn, Btk, Syk and Src. It blocks interleukin-7-induced JAK kinase activity in T-cells (JAK-1, JAK-3) and the consequent phosphorylation of PI-3 kinase. AG-490 is cell permeable and is a valuable tool for studying the cellular role of JAK kinases in signal transduction.
STORAGE & HANDLING:	Store tightly sealed at -20°C. PROTECT FROM LIGHT!

CAUTION: For laboratory research & scientific manufacturing use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: KS